CONTENTS OF VOLUME 12

No. 1, Part I. MARCH 1953

Abstracts of Papers in Physiology 3
Abstracts of Papers in Biochemistry 165
Abstracts of Papers in Pharmacology 297
Abstracts of Papers in Pathology 383
Abstracts of Papers in Nutrition 409
Abstracts of Papers in Immunology 435
Abstracts Received Late 467
Author Index i
Subject Index xvii

Part II

Program of Thirty-Seventh Annual Meeting, Chicago, Illinois, April 6–10, 1953 475

No. 2. JUNE 1953

Notes on the Thirty-Seventh Annual Meeting 595
Corrections and Additions to March Issue 596
Joint Session of the Federation
Bioluminescence: Evolution and Comparative Biochemistry. *E. Newton Harvey* 597
Vision. *George Wald* 606
Photosynthesis: A Thermodynamic Perfection of Nature. *Dean Burk* 611
1952 Fall Meeting of the American Society for Pharmacology and Experimental Therapeutics
Physiology and Pharmacology. *Walter J. Meek* 626
Symposium on Relationships Between Certain B-Vitamins and Purines and Pyrimidines
Folic Acid and Vitamin B_{12} in the Physiology of Vertebrates. *Thomas H. Jukes* 633
B-Vitamins Involved in Single Carbon Unit Metabolism. *William Shive* 639
Biosynthesis of Purines and Pyrimidines. *John M. Buchanan and D. Wright Wilson* 646
Mechanisms Involved in the Biosynthesis of Purines. *G. Robert Greenberg* 651

No. 3. SEPTEMBER 1953

Symposium on Communication in Biologic Organisms
Biologic Transducers. *Hallowell Davis* 661
Comparative Aspects of Some Biological Transducers. *Theodore Holmes Bullock* 666
Symposium on Chemistry and Functions of Coenzyme A
Introduction: Coenzyme A, Past and Future. *Fritz Lipmann* 673
Enzymatic Synthesis and Structure of CoA. *G. David Novelli* 675
Discussion. *Helmut Beinert* 681
Functional Group of Coenzyme A and Its Metabolic Relations, Especially in the Fatty Acid Cycle. *F. Lynen* 683
Discussion. *E. R. Stadtman* 692
Role of Coenzyme A in Fatty Acid Metabolism. *Henry R. Mahler* 694
Discussion. *William P. Jencks* 703
Succinyl Coenzyme A and Its Role in Phosphorylation. *Seymour Kaufman* 704
Discussion. *Mary Ellen Jones* 708
Metabolism of Thiolesters of Glutathione. *E. Racker* 711
Discussion. *Jane Harting and Britton Chance* 714

A 28624

Symposium on Metabolic Significance of B-Vitamins. *Notice of Publication* 716
Symposium on Immunochemical Analysis of Systems Containing Multiple Antigens
Antigen-Antibody Reactions in Gels. *Elmer L. Becker* 717
Estimation of Serum Protein Fractions by Immunochemical Technics. *B. V. Jager* .. 723
Immunochemical Analysis of Egg White. *H. F. Deutsch* 729
Antigenic Analysis of Insect Blood. *William H. Telfer* 734
National Register of Scientific and Technical Personnel 739
Report of Survey Activities at the Federation Meetings 742
Military Utilization of Scientific Personnel in Biological Fields 743
Preparation of Scientific Exhibits 744

No. 4. DECEMBER 1953

Thirty-Eighth Annual Meeting, Atlantic City, New Jersey, April 11–16, 1954 .. 747
Federation of American Societies for Experimental Biology
Federation Board and Committees, 1953–1954 749
Former Boards and Executive Committees 749
Constitution and Bylaws 753
Placement Service 755
American Physiological Society 756
American Society of Biological Chemists 760
American Society for Pharmacology and Experimental Therapeutics 765
American Society for Experimental Pathology 769
American Institute of Nutrition 771
American Association of Immunologists 774
Membership of All Societies
Alphabetical Listing 777
Summary of Membership 875
Deceased Members 876
Geographical Classification 877
Index to Volume 12 897

Corrigendum

Volume 12, September 1953

Page 719. Elmer L. Becker, "Antigen-Antibody Reactions in Gels." Second column, first line, read "higher" instead of "lower."